

Using intermittent pneumatic compression therapy to improve quality of life for symptomatic patients with infrapopliteal diffuse peripheral obstructive disease.

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BACKGROUND: Although the acute effect of intermittent pneumatic compression (IPC) therapy had been documented for patients with symptomatic peripheral arterial obstructive disease (PAOD), its efficacy in improving quality of life (QOL), especially for those with infrapopliteal diffuse lesions, remains unclear.

METHODS AND RESULTS: Thirty-one patients with infrapopliteal diffuse or multiple segmental lesions were enrolled in the study. Based on receipt of IPC therapy (3 h daily for 3 months), patients were allocated to a study (n=23) or control (n=8) group. The 6-min walking test, transcutaneous oxygen tension (TcPO₂), and QOL evaluated with the Short-Form 36 questionnaire were measured at the beginning and end of the study. In the QOL analysis, scores for physical functioning, physical and emotional role functioning, bodily pain, and general and mental health showed significant changes after IPC therapy. In the 6-min walking test, duration, and the initial and absolute claudication distances were significantly increased in the study group. The TcPO₂ also significantly increased in the distal end of the target limb after IPC therapy.

CONCLUSIONS: Patients at high risk for amputation with infrapopliteal diffuse or multiple segmental lesions can improve their walking ability, TcPO₂ of the target limb and QOL after IPC therapy.

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